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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
|---|-------------|----------------------|------------------------|------------------|
| 10/532,463  | 02/10/2006  | Hans-Peter Feuerpeil | 2117.004USU            | 1610             |
| 27623 7590 03/23/2007<br>OHLANDT, GREELEY, RUGGIERO & PERLE, LLP<br>ONE LANDMARK SQUARE, 10TH FLOOR<br>STAMFORD, CT 06901 |             |                      | EXAMINER<br>KIM, SUN U |                  |
|   |             |                      | ART UNIT               | PAPER NUMBER     |
|   |             |                      | 1723                   |                  |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 03/23/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

8

|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/532,463 | <b>Applicant(s)</b><br>FEUERPEIL ET AL. |  |
|                              | <b>Examiner</b><br>John Kim          | <b>Art Unit</b><br>1723                 |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 December 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-9 is/are pending in the application.  
     4a) Of the above claim(s) 7-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1723

1. Newly submitted claims 7-9 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Group I: Original claims 4-6 are directed to a device for filtering a medium as classified in class 210, subclass 321.67.

Group II: Newly submitted claims 7-9 are directed to a method of filtering a medium as classified in class 210, subclass 780.

Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as rotating membrane disk and turbulent disk in opposite direction to regenerate filter holes.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 7-9 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

2. Claim 5 is objected to because of the following informalities: "said second" on line 3 of claim 5 should be corrected to "said second species". Appropriate correction is required.

Art Unit: 1723

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Toyokazu (Japanese Patent No. 10-99611 and its associated patent abstract of Japan). Regarding claim 4, Toyokazu teaches a device for filtering a medium comprising at least one membrane disk (31) and at least one turbulence disk (30) having larger diameter than at least one membrane disk (31), wherein at least one membrane disk (31) and at least one turbulence disk (30) are rotationally mounted on separate hollow shafts (23), wherein at least one membrane disk and at least one turbulence disk are positioned in such a manner that a rotation axis of each of at least one membrane disk and at least one turbulence disk are essentially parallel to one another, at least one membrane disk and at least one turbulence disk overlapping when viewed from above, wherein at least one membrane disk and at least one turbulence disk are placed in spaced relation from one another in an axial direction so that at least one turbulence disk produces a turbulence in a region, the region being a relevant affected lateral face of at least one membrane disk, wherein at least one membrane disk is connected to a hollow shaft (23), at least one membrane disk being connected in a rotationally fixed manner so that at least one membrane disk (31) and said hollow shaft (23) rotate together, wherein the hollow shaft (23) is conductively connected to a cavity, the cavity being in said at least one membrane disk (31), wherein at least one membrane disk and at least one turbulence disk are driven in substantially a same direction of rotation, wherein at least one membrane disk (31) has less than disk diameter of a turbulent disk (30), and

Art Unit: 1723

wherein the device has a difference in a peripheral velocity on a connecting line, the connecting line between each rotation axis of at least one membrane disk and at least one turbulence disk, the difference between at least one membrane disk and at least one turbulence disk being inherently at least about equally large at every point in said region when the velocity of membrane disk and turbulence disk is held constant (see Figs. 1, 3-4; abstract). Furthermore, a recitation of “the device has a difference in a peripheral velocity on a connecting line, said connecting line...about equally large at every point in the region” in claim 4 is an intended use of the apparatus and depends on the velocity of membrane disk and turbulent disk. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Regarding claim 5, Toyokazu teaches that a pack of membrane disks (31) and a pack of turbulence disks (30) engage intermediate space (see Figure 4). Regarding claim 6, Toyokazu teaches that the cavity in the turbulence disk (30) is connected to a cavity in the hollow shaft (23) (see Fig. 4).

5. Applicant's arguments filed 2/28/06 have been fully considered but they are not persuasive. *Blasé et al* (DE 100 39 272) is a disqualified prior art and therefore the rejection of claims 4-6 based on *Blasé et al* has removed. Applicants argue that Toyokazu does not discuss the velocity of the periphery of the disk-shaped filter units. Disk-shaped filter units of Toyokazu inherently has periphery velocity when rotated. A recitation of “the device has a difference in a peripheral velocity on a connecting line, said connecting line...about equally large at every point in the region” in claim 4 is an intended use of the apparatus and depends on the velocity of membrane disk and turbulent disk. It has been held that a recitation with respect to the manner

Art Unit: 1723

in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kim whose telephone number is 571-272-1142. The examiner can normally be reached on Monday-Friday 7 a.m. - 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1723

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**John Kim**  
**Primary Examiner**  
**Art Unit 1723**

JK  
3/20/07